

CLAIMS

We claim:

1. A method for the automatic harvesting and qualification of dynamic database content comprising:

obtaining an initial categorization structure for organizing a plurality of subject areas of information;

obtaining a plurality of parametric information lists for optimizing operation to a user's requirements;

acquiring a listing of a plurality of qualified databases from said candidate database listing by matching each one of a candidate databases to said plurality of subject areas;

obtaining a query from the user, said query being associated with a subject area;

submitting said query to said plurality of qualified databases;

acquiring a collection of responsive content from said plurality of qualified databases;

indexing said responsive content to form an index of facilitating searching said collection of responsive content;

publishing a summary of said collection of responsive content for review by the user.

2. The method of claim 1, wherein said step of obtaining a plurality of parametric information lists further comprises:

obtaining a candidate database listing providing a plurality of databases to be considered for said step of acquiring a plurality of qualified databases;

obtaining an exclusion list providing a plurality of terms and sources to inhibit associations for said step of acquiring a

collection of responsive content;

obtaining an inclusion list providing a plurality of terms and sources restricting associations for said step of acquiring a collection of responsive content;

obtaining a stop list providing a plurality of terms to be excluded for said step of indexing said responsive content.

3. The method of claim 1, wherein said step of acquiring a plurality of qualified databases further comprises:

capturing an initial page from each one of said plurality of candidate databases;

evaluating said initial page for relevancy to said each one of said subject areas;

qualifying databases according to relevance to said subject areas;

associating said qualified databases with said subject areas.

4. The method of claim 3, further comprising:

obtaining a database relevancy parameter for restricting the qualification of databases below a minimum threshold value;

comparing the relevance of each initial page to said relevancy parameter;

removing each candidate database with a relevancy below said minimum threshold value from qualification.

5. The method of claim 1, wherein said step of acquiring a plurality of qualified databases further comprises:

submitting a query to each one of said databases;

capturing a plurality of pieces of responsive content provided by each one of said databases;

evaluating each one of said plurality of pieces of responsive

content for relevancy to said query;

assigning a numerical score to each one of said plurality of pieces of responsive content, said numerical score representing a degree of relevance to said query;

developing an aggregate score for each one of said databases;

selecting databases to be polled for content based upon said aggregate score.

6. The method of claim 5, wherein said step of capturing a plurality of pieces of responsive content further comprises:

obtaining a content parameter limiting the number of pieces of content to be captured from each one of said databases;

obtaining an initial weighting of each one of said pieces of responsive content from said database;

selecting a quantity of pieces of responsive content limited by said content parameter such that pieces of responsive content with a relatively greater initial weighting are selected before pieces of responsive content with a relatively lesser initial weighting.

7. The method of claim 1, wherein said step of acquiring a plurality of qualified databases further comprises:

capturing an initial page from each one of said plurality of candidate databases;

evaluating said initial page for relevancy to said each one of said subject areas;

obtaining a database relevancy parameter for restricting the qualification of databases below a minimum threshold value;

comparing the relevance of each initial page to said relevancy parameter;

removing each candidate database with a relevancy below said minimum threshold value from qualification;

qualifying databases according to relevance to said subject areas;

submitting a query to each one of said databases;

capturing a plurality of pieces of responsive content provided by each one of said databases;

obtaining a content parameter limiting the number of pieces of content to be captured from each one of said databases;

obtaining an initial weighting of each one of said pieces of responsive content from said database;

selecting a quantity of pieces of responsive content limited by said content parameter such that pieces of responsive content with a relatively greater initial weighting are selected before pieces of responsive content with a relatively lesser initial weighting;

evaluating each one of said plurality of pieces of responsive content for relevancy to said query;

assigning a numerical score to each one of said plurality of pieces of responsive content, said numerical score representing a degree of relevance to said query;

developing an aggregate score for each one of said databases;

selecting databases to be polled for content based upon said aggregate score;

associating said qualified databases with said subject areas.

8. The method of claim 1, wherein said step of acquiring a plurality of qualified databases further comprises:

analyzing an initial page from each one of said plurality of qualified databases for formatting;

determining an input location for passing queries by said initial page to each one of said plurality of databases;

determining results locations for capturing search results returned from each one of said plurality of databases;

recording said input location and said results locations for use in formatting queries for each one of said databases.

9. The method of claim 1, wherein said step of acquiring a collection of responsive content further comprises:

comparing each piece of responsive content to each one of said subject areas in said initial categorization structure;

matching each piece of responsive content to subject areas based on relevance of the responsive content to the subject areas;

filtering matches to optimize said categorization structure.

10. The method of claim 9, wherein said step of filtering matches further comprises:

removing duplicate pieces of responsive content;

obtaining a population parameter for limiting a number of pieces of responsive content which may be matched to any one subject area;

obtaining an occurrence parameter for limiting a number of subject areas to which any one piece of responsive content may be matched;

restricting matches for each one of said subject areas according to said occurrence parameter and said population parameter.

11. The method of claim 9, wherein said step of filtering matches further comprises:

obtaining an exclusion list to inhibit matches based on predetermined words and sources;

obtaining an inclusion list to restrict matches based on predetermined words and sources;

matching each piece of responsive content with subject areas

according to said exclusion list and said inclusion list.

12. The method of claim 9, further comprising:

creating a categorization file for recording matches between each piece of responsive content and each subject area;

saving said categorization file to a storage medium for use in searching said collection of responsive content.

13. The method of claim 1, wherein said step of indexing said responsive content further comprises:

obtaining a stop list providing a list of words not to be indexed;

parsing each piece of responsive content into constituent words;

eliminating words of said responsive content occurring on said stop lists;

recording a location of every occurrence of constituent words in said collection of responsive content.

14. The method of claim 1, wherein said step of publishing a summary further comprises:

determining if a summary is provided for each piece of said responsive content;

examining each piece of said responsive content for keywords associated with each subject area;

developing a keyword summary score for each piece of responsive content;

examining each piece of said responsive content for relevant extracts forming an extract summary;

developing an extract score for each piece of responsive content;

comparing said keyword summary score to said extract score for a summary composite score;

selecting said keyword summary if a predetermined summary value is exceeded by said summary composite score;

selecting said extract summary if a predetermined summary value if not exceeded by said summary composite score.

15. A system for the automatic harvesting and qualification of dynamic database content comprising:

a computer system having a communication means for communicating with at least one other computer including a database to facilitate the two-way flow of information between said computer system and the at least one other computer;

said computer system having a storage means for retention and recall of data communicated by or to the at least one other computer;

said computer system having a processing means for executing multiple software modules and performing comparisons between a user supplied query and a plurality of documents found in at least one other computer;

an index for storing a plurality of pre-approved internet sites to be included in a series of queries;

a configuration module adapted for translating a generic query into site-specific dialects such that a single user defined query may be directed to multiple sites automatically;

a selection module adapted for characterizing said plurality of documents returned by the database of the at least one other computer and associated with said user defined query;

a results index to allow for rapid recovery of specific portions of any one of said plurality of documents characterized by said selection module; and

a generator module for automatically generating at least one results page for the user conveying information associated with any one of said plurality of documents associated with said query.